

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE  
HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants:	Sonja Eijsbouts	Examiner:	C. Nguyen
Application No.	09/829,625	Group Art Unit:	1754
For:	Process for Activating a Catalyst Containing an S-Containing Additive	Docket No.:	ACH2779US
		Filing Date:	April 10, 2001

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Commissioner for Patents  
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BRIEF ON APPEAL

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on

June 23, 2004

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Respectfully submitted,

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07/01/2004 CCHAU1 00000085 011350 09829625

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### APPEAL BRIEF

Sir:

#### I. INTRODUCTION

This is an appeal from a final Office Action for the above-identified patent application, mailed October 16, 2003, followed by an Advisory Action, mailed March 29, 2004, allowing claims 1-13, 15-30 and 34-36, rejecting claim 31 and withdrawing claims 32-33 from consideration.

#### A. Real Party In Interest

The real party in interest for this appeal and the present application is Akzo Nobel N.V., by way of an Assignment recorded in the U.S. Patent and Trademark Office at Reel 011973, Frame 0949.

#### B. Statement Of Related Appeals And Interferences

There are presently no appeals or interferences, known to Appellant, Appellant's representative or the Assignee, which will directly affect or be directly affected by or have a bearing upon the Board's decision in the pending appeal.

C. Status Of Claims

Claims 1-13, 15-30, 31 and 34-36 are pending, claims 1-13, 15-30 and 34-36 are allowed and claim 31 stands finally rejected, and is on appeal. Claim 31 on appeal is set forth in the attached Appendix as a dependant claim that depends from claim 1.

D. Status Of Amendments

An amendment was filed after final rejection and was entered for purposes of Appeal.

II. THE INVENTION

Appellant has discovered a novel and nonobvious process, determined by the Examiner to be patentable, for activating a catalyst composition comprising at least one hydrogenation metal component of Group VI and/or Group VIII of the Periodic Table, and an S-containing organic additive. The catalyst is contacted with hydrogen at a temperature between room temperature and about 600°C, and prior to or during the contacting with hydrogen the catalyst is contacted with an organic liquid. The amount of organic liquid contacted with the catalyst is about 20-500% of the catalyst pore volume which can be filled with the liquid under the conditions at which contact occurs.

The aspect of the invention that comprises the subject matter of this appeal is the catalyst obtained by the above process.

III. THE APPLIED REFERENCES

The applied references are PCT WO 94/25157 (Seamans) and U.S. Patent No. 5,139,990 (de Jong).

IV. ISSUE

The issue on appeal is whether claim 31 would have been anticipated by under 35 U.S.C. 102(b), or, in the alternative, obvious to one of ordinary skill in the art under 35 U.S.C. §103(a) over Seamans or deJong.

V. GROUPING OF CLAIMS

There is only one claim, which is claim 31, and therefore only one claim group at issue in this Appeal.

A second group of claims, claims 1-13, 15-30 and 34-36 has been allowed.

The claims of the first and second group do not stand or fall together.

VI. ARGUMENT

The Examiner is correct in crediting Seamans as disclosing an activated catalyst wherein the catalyst to be activated is a supported metal catalyst containing elemental sulfur, particularly a Group VIB and/or Group VIII metal catalyst.

The Examiner is also correct in crediting de Jong as disclosing an activated catalyst that contains a carrier having deposited thereon one or more metals or compounds of metals, such as oxides, the metals being selected from a group including Group VIB and Group VIII of the Periodic Table.

However, neither Seamans nor de Jong give any hint to the novel activation process of the invention, and what the Examiner does not seem to understand is that the composition of the catalyst of claim 31 is thereby readily distinguishable from the prior art compositions. It is made clear in the examples of the instant text that catalyst activated in accordance with the process of the

invention shows surprising and unexpected improved activity with regard to hydrodesulfurization, hydrodenitrogenation and hydrodearomatization as compared to catalyst that is identical except for not having been activated in accordance with the process of the invention. The examples of the instant text thus serve to compare the catalyst of the present invention, i.e. catalyst prepared by a novel activation procedure, with the closest possible prior art, which is catalyst identical in every respect, except prepared in a manner not including such novel activation procedure.

It is well established law that a compound and all of its properties are inseparable (*In re Papesch*, 137USPQ 43, 51), and, therefore, the improved activity of the catalyst of the invention is as an essential part of the catalyst composition as any other aspect of the composition, such as metals content, thereby imparting novelty.

It is the Examiner's failure to recognize the novelty so imparted that is the error in the rejection under 35 U.S.C. 102.

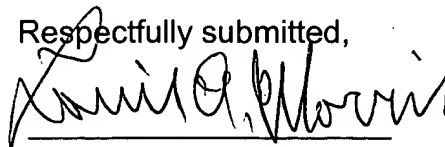
The case law cited by the Examiner serves to support Applicant's position. Cases such as *In re Thorpe*, 227 USPQ 964, *In re Brown*, 173 USPQ 688 and *In re Fessman*, 180 USPQ 324 stand for the principle that in product by process claims, the product produced must be shown to in fact differ from the products known in the art. Applicant understands and agrees with this principle, but, as discussed above, the catalyst of claim 31 has been shown to differ from the product of the closest prior art via comparative data, and is therefore novel.

Furthermore, the comparative data illustrates results that are surprising and unexpected, which obviates an obviousness rejection and makes clear that the rejection under 35 U.S.C. 103 was also in error.

VII. CONCLUSION

For all of the reasons discussed above, it is respectfully submitted that claim 31 defines patentable subject matter under 35 U.S.C. §102 and 35 U.S.C. §103, and Appellant respectfully requests this Honorable Board to reverse the rejection of claim 31.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Louis A. Morris", written over a horizontal line.

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VIII. APPENDIX

CLAIMS:

1. A process for activating a catalyst composition comprising at least one hydrogenation metal component of Group VI and/or Group VIII of the Periodic Table, and an S-containing organic additive, wherein the catalyst is contacted with hydrogen at a temperature between room temperature and about 600°C, and prior to or during the contacting with hydrogen the catalyst is contacted with an organic liquid, wherein the amount of organic liquid contacted with the catalyst is about 20-500% of the catalyst pore volume which can be filled with the liquid under the conditions at which contact occurs.
31. A catalyst obtained by the process of claim 1.